(1913-16) 1922 Copper Eskimo

"INTRODUCTION

When the Canadian Arctic Expedition left Esquimalt, British Columbia, on June 17, 1913, there were two anthropologists on its staff, M. Henri Beuchat, the famous French savant, and myself. Our instructions called for three years research work in the vicinity of Coronation gulf, M. Beuchat devoting his attention more specifically to the language, manners, customs and religious beliefs of the Eskimos of that region -- the Copper Eskimos -- while I was to study their physical anthropology, technology, and archaeology. The first year was a year of disaster. Our largest vessel, the Karluk, was crushed in the ice, and several members of our staff, including M. Beuchat, perished either on the ice or on Wrangell island. At the same time the remainder of the expedition found itself doomed to spend its first winter on the north coast of Alaska. From November, 1913, to February, 1914, I lived with the Eskimos near Barrow, gathering folk-lore and compiling a grammar and vocabulary of the language. In March I travelled eastward, and joined the southern party of the expedition at Collinson point, about 100 miles west of the Alaska-Canada boundary. There I continued my linguistic studies for a short time, then at the end of May moved down to Barter island, and spent the next few weeks in excavating some of the ancient ruins on this old trading-site of the Alaskan and Mackenzie river Eskimos. The large collection of archaeological speci-

mens now stored in the Victoria Memorial Museum at Ottawa represents but a portion of the ethnological results that were obtained during our first year in the Arctic, when we were still over a thousand miles from our original objective. Indeed it was not until August, 1914, that the southern party of the expedition was able to establish a base at Bernard harbour, on the south side of Dolphin and Union strait, within the territory of the Copper Eskimos. There, with less than two years at my disposal, I had to carry out M. Beuchat's work as well as my own, and attempt as far as possible to cover the whole field of anthropological research.

The autumn of 1914 was spent in routine duties around our station at Bernard harbour. We had to unload the vessels, build a house and store-room, set up the meteorological instruments, and collect the driftwood scattered along the coast for fuel during the coming winter. Our only assistant at this period was a young Mackenzie river native named Palaiyak, most of whose time was taken up in hunting. Twice we were visited by small bands of local natives who lingered in our vicinity for two or three days, then disappeared again inland. At the beginning of November, as soon as it was possible to travel along the coast by sled, one of the topographers, Mr. J.R. Cox, accompanied me on a short trip west to Cape Bexley in order to discover whether any of the Eskimos had come down to the coast in that direction. Our journey was fruitless, however, for we found no traces of the natives anywhere.

On November 19, two families of the natives suddenly appeared at our station, and a few days later I joined them at their camp three or four miles east. One of them guided me at the end of the month to the Eskimos on the [10] opposite side of the strait, with whom several days were spent. I visited the latter Eskimos again early in December, and lived with them for about three weeks. The greater part of January was spent in their winter settlement at the Liston and Sutton islands, and time was found to pay a brief visit to another group of Eskimos who were living on the south coast of Victoria island some fifty miles to the northwest. In February I accompanied Dr. R. M. Anderson, the leader of our party, up the Coppermine river, and on the return journey visited the Eskimos of western Coronation gulf. Many of these gulf people accompanied us to Bernard harbour, and settled down beside us, so that it was possible to carry on researches at our own station. Towards the end of the month I accompanied Mr. Cox on a short survey trip along the coast to Locker point, and had an opportunity of paying another visit to the Eskimos in that region.

In April, 1915, the Eskimos, who had been living in large communities on the sea ice all through the winter, began to break up into small bands and slowly travel towards the land at various points along the coast. As they would be hunting and fishing inland throughout the summer, and would probably seldom come near our station, I decided to attach myself to one of their parties during that period and to share their migratory life. An old couple adopted me into their family, and from May to November we wan-

dered about in the southwest of Victoria island. By that time the strait was frozen solidly again and I was able to rejoin the expedition at Bernard harbour.

A large band of natives settled beside our station in the middle of November, and for a month researches were carried on among them without going further afield. They crossed over to the Liston and Sutton islands early in December, and I followed them and spent the greater part of that month and of the following January in their settlement. In February, 1916, accompanied by the Rev. H. Girling, an Anglican missionary who had entered the country the previous summer, I travelled east to the Jamieson islands in order to visit the Bathurst inlet natives. Very bad weather was encountered on both the outward and the homeward journeys, so that we did not reach Bernard harbour again until March 18. A large train of natives from all parts of Coronation gulf followed us to our station and settled down beside us for a month, a very welcome proceeding, as it saved me from the necessity of living in their settlements. On April 20, Mr. Girling and myself set out for his station some 120 miles to the west, at Point Clifton, the topographers of the expedition having reported near this point some ancient houses built of wood and sod after the manner of the western Eskimos. I returned on May 15, and continued my ethnological work among some Eskimo families who had camped beside our house. June was a very busy month, as all our specimens had to be packed and the ship loaded in preparation for our departure as soon as the ice conditions should render

navigation possible. Nevertheless, towards the end of the month, I journeyed overland to Cape Krusenstern to examine an old stone house in that vicinity, and to visit the various bands of Eskimos who were trapping salmon in different creeks along the coast. Finally, on July 13, 1916, after spending rather less than two years in the region of Coronation gulf, the expedition sailed out of Bernard harbour on its return journey to civilization, and our field-work came to an end."

"There was firm ice over the whole of Simpson Strait on the 1st of November 1923, and, as far as we could see, the weather was good out over Queen Maud Sea too. It was time to start off with my two Greenland companions Arnarulúnguaq and Qàvigarssuaq. We were now about to leave the Netsilingmiut, with whom we had become fast friends as the result of our long sojourn among them, to explore new fields in the land of the Copper Eskimos. Parting from them was no light matter; the Netsilingmiut themselves seemed to be moved at the prospect of our leaving them -- perhaps never to see them again. Our friendly intercourse, and the gravity thrown over our conversations by the nature of my work, had helped to form ties that now were not so easy to cut through.

Side by side with the Eskimos were our new friends, the Hudson's Bay Company traders Peter Norberg, the Swede, and Henry Bjørn, the Dane, who had left nothing undone to assist us with our preparations for the long journey ahead of us. That it was long there is no denying; for, if we got through, we were to be right across to Nome in Alaska at the end of spring or the first part of summer. Unfortunately the season so far was against long journeys; actual daylight lasted only about four hours, and, if any reconnoitring had to be done, a whole day was easily lost. We had the option of taking the route over the safe ice right in under land or trying to find a short cut across Queen Maud Gulf, over ice that was not to be depended on. On the second day out we voted for the latter, for along by the shore we were more or less certain to meet with old,

frozen-in pack ice, which would not only take too much out of the dogs but delay us very considerably."

3: Rasmussen--7-8 (c. 1923) 1932 Copper Eskimo-1-2
116, 122, 132

"Queen Maud Gulf is a large, expansive sea running out into relatively narrow straits to the north, west and east. There is a fairly [8] swift current through these straits, and as swell and wind have more or less free play over the broad indentation between Victoria Land and the mainland, it is rather late in the year before the water further out is sheeted with ice. Along by the shore, however, where the efflux of many rivers makes the water fresh, and innumerable small islands bind the ice, it is often possible to count upon a covering of ice as early as the beginning of October. Day by day this border of ice along the shore spreads over towards Victoria Land, the outer margin growing with every few days of calm weather. If the temperature is about 20 degrees below zero, one can drive over this new ice when it is only about two days old, even with heavy sledges. There is no snow on it at all, its only covering being a thin layer of rime; it is smooth and firm and not packed anywhere, and provides such easy going that, if one has willing dogs, what would otherwise be a long day's journey can be traversed in the course of a few hours. The only drawback is that great caution is necessary, and the uninitiated will often be unable to see the difference between the thick, safe ice and places where it is only a few hours old. This may be fatal, for it is always extremely dangerous to fall through thin ice where there is no snow. On breaking through the water washes over the unbroken edges and softens them, so that one continues to fall through; unless there is really old ice close by it is rarely possible

to clamber up again. It was thus a risky proceeding to drive our collections over such going, but on the other hand we had faith in our ability to distinguish between good and bad and so determined to take the chance. One thing we did not dare to do, and that was to overnight on this new ice, as with the slightest breeze it would break up, and either begin to pack under the very sledges or drift out to sea. So every afternoon we had to drive a considerable distance in towards the old ice and pick out a place to bivouac. And as a matter of fact this was necessary in order to renew our supplies of drinking water."

3: Rasmussen--8-9 (c. 1923) 1932 Copper Eskimo
116, 122

"Thus we spent a very exciting week, Qâvigarssuaq and I forcing our daily distance up to the utmost as long as the light lasted. For the purpose of helping to transport our ethnographical collections we had a companion sledge with two men, Inugtuk and Usugleq. These two were experienced travellers, always ready and willing, but their dogs were only poor. The result was that we left them behind every day, and every evening we others spent some anxious hours until the whole expedition with baggage complete had gathered at the place that we had selected for our camp. As soon as twilight fell, and we had fixed upon a place to sleep, Qâvigarssuaq and I used to ignite large beacons of blubber to guide the two Netsiliks to us, as [9] our sledge tracks on the bare ice were difficult to follow. In those dark evenings these bonfires glared with entrancing beauty; all around us was waste and grey, and when we stood still we could hear the grating moan of the ice out in the open sea, which was never very far away.

However, these hurry-scurry days with their strange, tense nights eventually came to an end; as early as the ninth of November we had got to the land west of Ogden Bay, nearly up to Kûgssuaq River, whence we could follow the coast almost straight along to Melbourne Island. We were greatly impressed by the river, which seemed to be at least twenty to twenty-five kilometres wide at the mouth."

3: Rasmussen--9 (c. 1923) 1932 Copper Eskimo
116, 122, 133

"The coast of the mainland, with Queen Maud Gulf, is very little known, and yet it is one of the most interesting along the whole of the northlands of Canada. Thousands of small smooth-worn gneiss islets protect the low land from the sea and the enormous masses of ice, with the result that on the landward side of these islands we had an exceedingly pleasant trip for the rest of the way, not a sign of pack ice, and sufficient snow to make the going perfect. There are crowds of game on land in the proper seasons, and as yet the spring and autumn migrations of the caribou especially seem to be quite undisturbed. Quite a number of rivers of considerable size provide means of communication for the roaming caribou hunters, and here and there also provide splendid trout fishing. When we passed along the coast, however, we did not meet any people, for at that time of the year they are still in the interior. I knew that later on in the coming winter I would find most of them round about Kent and so did not waste time on going to visit them now; we kept on at the same speed as long as we had provisions and dog-feed enough."

"It was no later than the tenth of the month when we crossed Aulatsivigssuaq, whose name in English is White Bear Point -- a low spit projecting into the sea for about 15 kilometres. The land we passed over seemed quite luxuriant to us after our long stay in the barren and bare regions in the east, and we were particularly surprised to see the grass sticking up out of the snow. On the evening of that day we were able to pitch our tents just off the mouth of the Kûnajuk, or Ellice River, which forms a tremendous delta in a bay with at least 30 kilometres width of fresh water. We camped on a small island, where foxes had broken into a blubber cache and had a high time of it all that autumn; on the ice and on the island there were so many tracks that it was like being in a big village, with all the snow trampled firm and hard by children at play.

By this time we should have been further inland, a two-days' journey, to fetch the dogs that Qâvigarssuaq had left last summer; [10]but as the man who had taken charge of them had promised to take them to Kent as soon as the ice formed, we preferred to continue on our way. If we met nobody, and if we ourselves were compelled to hunt in order to feed the dogs, we could easily spare the days we had gained by our rapid run over Queen Maud Gulf.

During the next two days we struggled against a violent blizzard; we could scarcely see anything, but as we merely had to follow the line of the coast, abreast of which there were still a number of islands, we could not go wrong; so we defied wind and

weather with such good results that we had already passed Melbourne Island on the thirteenth of November and fell in with the first Kitlinermiut while crossing the land between Queen Maud Gulf and Arctic Sound, which like the arm of a mighty fjord shoots in behind Kent Peninsula. By taking this route we again made a short cut to the trading post, at the same time escaping the pack ice that is always to be found around projecting tongues of land."

"Through the land of the Copper Eskimos.

I had put January 16th as the extreme limit of my stay among the Umingmaktôrmiut, for between this field of my operations and my next lay a stretch of about 2200 kilometres. This distance had to be traversed as rapidly as possible, but there would have to be halts here and there for the purpose of studying the people with whom we fell in, and thus obtaining an opportunity of making comparisons and drawing conclusions on the basis of the diary material I now had compiled from by observations among other Eskimo groups. It was therefore a source of great satisfaction to me that our dogs were in excellent condition after their long rest and thanks to the splendid treatment they had received at the hands of Mr. Clark. For it is a fact that on all arctic journeys one is involuntarily inclined to place on a somewhat lower plane the hospitality shown to one's own person; the heart grows warmer towards the man who feeds and fattens one's dogs.

We divided the dogs into two teams, relatively small ones having regard to the loads we would have to take. I, together with Arnarulúnguaq, had to be content with six of our best dogs, but on the other hand had the smaller sledge and a comparatively light load, which nevertheless turned the scale at about 300 kilos. Qâvigarssuaq was given ten dogs, and was to drive Leo Hansen and all his kinematographic equipment, which was of considerable weight ; I estimate their load at about 500 kilos. But thanks to the mud-and-ice shoeing--that brilliant Eskimo invention that reduces the friction of sledge

runners to the absolute minimum--we were able from the very start, when the loads were heaviest, to set up such a pace that our long sledge journey could be completed within the period we had planned. [53]

The speed that now comes over our journey is necessarily reflected in the description of it. Although every day was an experience in itself, remaining vividly in the memory long afterwards, I will glide lightly over everything that has already been dealt with in detail in the foregoing. The narrator is apt to become garrulous and to devote himself principally to events that were festive and made him happy.

Today I muster all my impressions of the journey in a little nameless Eskimo song from the Kitlinguharmiut:

And I think over again
My small adventures
When with a shore wind I drifted out
In my kayak
And thought I was in danger.
My fears,
Those small ones
That I thought so big,
For all the vital things
I had to get and to reach.

--- --- ---
And yet, there is only
One great thing,
The only thing:
To live to see in huts and on journeys
The great day that dawns,
And the light that fills the world.
--- --- ---

Our departure from Kent took place with the thermometer at 42° C. below zero, with the cold snow sweeping along right in our faces. We set our course for our old camping place, Malerisiorfik, for the purpose of recovering a quantity of baggage we had stored there. Wind-torn and fairly exhausted we arrived in the shelter of Qanijak's large and spacious snow hut, where all the afternoon there was a commotion of people coming and going, people who wanted to see us once again or to trade. It was for all the world like a menagerie---the shouting of human throats intermingled with the howling of dogs, for our host's dogs were kept inside in the warmth to save food. We ourselves lay up on the skin-covered platform and received our visitors.

The storm compelled us to stay where we were, and it was only on the eighteenth of the month that we succeeded in getting away, though it was still snowing. At some

distance from the village we fell [54] in with our old friend Tatilgak, who was out sealing at the breathing holes. Though he was far off our course he soon caught up with us, and, true to these people's passion for bargaining, tried to sell us all his sealing implements for flour; not being successful in this he proposed to go with us, just as he was, as guide and snow-hut builder as far as Tree River; this meant a run of at least fourteen days there and back. He had no sledge and no dogs with him, but up there these are not considered the essentials of a journey. His amusing suggestion was not accepted; instead, we sent a few presents to his wife 'The Marmot', and continued our way westwards.

On the twenty-first we rounded Cape Barrow, and, after having kept to the comparatively low granite shore for some hours, we headed for a high, steep mountain, but did not reach it until the following afternoon. The weather, which for a day or two had been fine and pleasantly mild, now threatened a snowstorm; drifting mists lay over the terrain, and, just when it was impossible to get our bearings, the dogs scented man. Off we went at a sweeping gallop, and about three o'clock we came to a village right out on the ice, where we received a tumultuous welcome. The village consisted of forty-six people--twenty-five males and twenty-one females--and they told us the place was called Agiaq; the name they gave themselves was Agiarmiut."

3: Rasmussen--54-55 (c. 1923) 1932 Copper Eskimo-1-3
116, 122

"We had gradually become accustomed to standing en garde in the face of people's all too effusive cordiality when welcoming us, but here we were pleasantly surprised to find quiet, almost modestly polite people who lost no time in offering to help us to build a snow hut quickly. The snowstown was right over us. On land the mountains as it were raised bristles--whirling columns of snow tossed about their summits, and we had no time to waste. A little way from the village we found a snowdrift and, as darkness had already set in, we had to be content with it, though really it was rather too soft. Less than an hour later we were under cover, and almost simultaneously the storm descended upon us and kept us there from the afternoon of the twenty-second till the twenty-sixth. All this time we were literally shut up in the hut, which all the time threatened to sweep away over our heads because the material had not been hard enough. We had constantly to go outside and renew and patch it--no light work under the violent pressure of the storm. The blocks of snow we cut out of the drifts simply blew away in our hands.

For four days the storm continued with unabated violence, and all the folks who visited us had to carry snow-knives in case they lost their way; it was barely five minutes' walk, and yet it was as much as [55] one's life was worth to get lost. Nevertheless the house was continually full of guests, men, women and children--in fact infants in their amaut, and once again I could not admire the ability of these people to adapt themselves to nature. Just think--a man goes to visit some friends five minutes away from his own house; if he goes wrong it means death unless he has a knife with him--and of course

they always have--and in that case he merely builds himself a little house; there he can hang on, although not at all warm, until there is a lull in the storm. Many at home would doubtless consider these to be rather severe conditions for cultivating social intercourse; up there they laugh at it and merely think it makes visiting less commonplace.

All our baggage and our sledges were buried so deep that we scarcely knew where they were, and even the dogs disappeared and became small hummocks in the drifts;; there, however, they were cosy and warm. Everything was enveloped in the flying snow, and only rarely did we catch a glimpse of the steep rocks of Agiaq Point like black animals through the thick air. It was as if one was shut in a fury of breakers, that took the breath away as soon as one put one's nose outside the doorway.

Still, that did not prevent a constant stream of people from coming to see us. We would hear a sneeze out in the passage--snow being blown out of mouth and nostrils; then commenced a beating of clothes that would last so long, that in the end one could scarcely believe there was any hair left on the furs; then at last they bobbed up, smiling and happy, blown clean in the storm, with glowing cheeks and icy eyebrows. They came and offered us dog feed in the form of raw seal skin and meat; they were very reasonable in their demands and gave vent to expressions of real pleasure at the prices we paid them. It had been a hard summer for them. Their territory, which prior to the establishing of the trading post had been one of the best caribou regions in the whole of the Coronation Gulf area, had last summer been almost bare of game--caribou had not been

seen at all. They had lived wretchedly on a few isolated, wandering musk oxen, small fish from the lakes, and ptarmigan--not at all the food that goes far in an Eskimo house. As soon as the sea had frozen over they had started sealing, and now the bad summer was over and done with, and their good humour once more in the ascendency, even if some of the adults still bore the signs of a long and severe period of starvation on their faces."

27:Chown & Lewis 3-5 (1958)1959
ND8 Copper Eskimo ND8

[P 13, B]

The Blood Group Genes of the Copper Eskimo[1]

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175
648

[563]

124
582

124
126
143

[165]

[22]

or child may have been spared and incorporated into the population.

As to the other admixtures there was only a rare contact between Eskimo and people other than Indian from 1771 until about 40 years ago. These were not whaling waters. A few explorers and trades entered the area, some of whom married Eskimo women. These events are so recent that children of these marriages are still living, a number of whom we tested. Today there are two small white settlements, that at Cambridge Bay and that at Coppermine, and several still smaller implants.

In the present study 330 out of the total of approximately 1000 were tested. With the help of Corporal and Mrs. D. McDougal of the R.C.M.P., Father LaPointe, O. M. and the Reverend Canon Sperry a detailed genealogy was drawn up. There were no first-cousin marriages.[3] The genealogy could not be carried far enough back to prove or disprove second-cousin marriages. Of the 330, only 10 could be proved to have white ancestors; these 10 were eliminated in gene frequency analysis. Such analysis was carried out for the remaining total 320 and for 46 among them who were apparently unrelated. While there is no significant difference between the two estimates, we think analysis based on the 320 is probably more accurate since phenotypes of low frequency were then represented. The estimates in the tables are so based. There is a high death rate in young adults, so it was unusual to obtain blood from children and both parents. Few genotypes could therefore be defined but in what family data we did obtain, there was no disagreement between expected phenotypes and those found.

[1] Assisted by a grant from the National Museum of Canada. Dr. Jacques Rousseau, Director.
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[3] See addendum.

[P. 17, B]

may well be in the present Eskimo population a Dorset residuum which is genetically recognizable. It is hardly to be expected that such recognition will depend upon the presence of a strange gene in one population that is absent from the other, but rather upon differences of frequencies of genes already known or to be discovered, differences such as are indicated in the above data. One can as yet draw no firm conclusions, but certainly the indications are enough to make further genetic studies, even more complete than the present one, worth-while.

SUMMARY

Blood group gene frequencies were determined based on samples from 320 Copper Eskimo as follows: *O*, 0.6770; A_1 0.2914; *B*, 0.0316; *M*, 0.8422; *N*, 0.1578; *S*, 0.1827; *s*, 0.8173; *MS*, 0.1719; *Ms*, 0.6703, *NS*, 0.0000, *Ns*, 0.1578; P_1, 0.1842, P_2, 0.8158; *CDe*(±*Cde*), 0.4985; *cDE*(±*cdE*), 0.4906; *cDe*(±cde), 0.0109; Fy^a, 0.7500; Fy^b, 0.2500. The following phenotypes were found to have a frequency of 1.00; Lu (a − b +), K − k + Kp(a − b +), Le(a−) and Sec. The following antigens were not present in the population tested: He, M^g, Mi^a, Vw, C^w, V, Di^a, Be^a, By^a, and Wr^a. Differences between this population and other Eskimo populations studied were noted in the ABO, MNSs and Duffy systems.

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ADDENDUM

Since this article was written we have obtained additional genealogical information from Mr. Wm. Joss, Manager of the

Caribou leg skins were made into dog harnesses, snow mittens, and winter boots. The ears were used to trim the fronts of trousers at the waist line, or the backs and hoods of coats. The light skins of unborn fawns, or of fawns only a few days old, made serviceable clothes for tiny children, as well as summer caps to protect the head from mosquitoes, though for this last purpose marmot skin was often used instead. There were certain fashions in clothing. The heavy winter outer coat (*qulitaq*) was normally made from autumn skins, an adult's coat from the skins of the larger caribou, and a child's coat from yearlings and fawns. The two everyday coats, the *ilupaq* or inner coat and the *kapitaq* or outer coat, were of very short-haired summer skins; so, also, were the trousers, though for winter sealing it was advisable to have the outer pair of the thicker autumn skin. The same principle applied to the rest of the clothing and to the bedding; wherever warmth was especially requisite, autumn skins were necessary; otherwise the Eskimo preferred the light summer skins.

The spring skins of caribou were thrown away except in emergencies, because they were full of holes from the escaping larvæ of the warble-fly, and the hair was shedding to make way for the summer coat.

Other Skins. Polar-bear skins provided very useful "sleds" in spring, when the frozen mud runners of the ordinary sled melted and dropped off. There seems to be an oil in the hair of the polar-bear skin that renders it impervious to water; hence Copper Eskimo travellers commonly used a mitten or pad of bear skin to ice their sled runners. For the same reason sealers preferred a foot-pad of bear skin to one of caribou skin, which sheds its hair with dampness. The natives of Prince Albert Sound and Minto Inlet sometimes used bear skin for clothing, more especially for trousers, because caribou were less plentiful in their districts than farther south. The animal was skinned in the same way as a caribou.

So few brown bears were killed that there was no established use for their skins. Musk-ox skins, on the other hand, were much sought after for bedding, being laid under the caribou skins on top of willow matting. The northern natives sometimes made heavy coats from them.

Hares, foxes, ermines, and marmots were all skinned in the same way. A cut was made up the back of each hind leg and across to the tail, and the skin pulled off forwards. The forelegs were drawn out and severed at the ankles, and the ears were pulled out with the teeth. The tail of the fox, owing to its exceptional length, was often slit half-way down. Hare skins were used only for towels or socks, but fox skins up to at least a generation ago were sometimes made into coats. One of the dance songs popular in 1915 among the Dolphin and Union Strait Eskimo commemorated its use in this way.

The ermine was prized very highly as an ornamental appendage to the coat; consequently, the sight of one of these animals always occasioned the greatest uproar and excitement in a camp.

Of more value to the Copper Eskimo than all the other small animals was the marmot; from its skin they made coats, trousers, caps, trimmings for the tops of snow mittens and boots, and linings for the soles of caribou skin socks. From the same skin, also, they made tool bags and pouches for holding the fire apparatus. As a rule, however, marmot skin coats and trousers were confined to children, because their use by men suggested a lack of skill in caribou hunting. The natives of Victoria Island obtained their marmot skins by barter, as the animal does not extend beyond the mainland.

The Copper Eskimo killed very few wolves or wolverines until they obtained rifles and traps. We saw one man wearing a heavy coat of white wolf skins, and wolverine skins were probably put to similar use; at all events the natives readily made a sleeping bag from wolverine skins for a member of our expedition. They skinned birds in exactly the same way as small animals, except that

together again. Heel crimping was naturally confined almost entirely to the more decorative shoes. When not crimped, this type usually had one seam up the middle of the heel, whereas the plainer type frequently had two and even three.

A casing of sealskin (more rarely, caribou skin), undressed, and sometimes not even dehaired, was sewn round the top of the shoe to hold a cord of plaited sinew (*singiq*) that emerged through two holes at the back and tied in a bow over the instep. Two large patches of sealskin, dehaired but undressed, covered the whole or almost the whole of the sole, giving it double thickness; and whenever a hole wore in either patch, another was promptly superimposed on it. These patches had to be sewn on with concealed stitches that caught only the under surface, because the thread would quickly fray and break if it penetrated to the outside. Natives who anticipated considerable walking on glare ice or very hard, firmly packed snow sometimes added also narrow, meandering patches —"crevpers"—to give them securer foothold (Figure 10c).

In the autumn of 1915, when the party with which I was travelling was still hunting inland, an Eskimo induced his wife to make him a pair of caribou-fur overshoes and to reinforce them with extra soles of sealskin. From another native I obtained a similar pair of caribou-fur overshoes that bore outer soles of dehaired caribou skin, and, over the outer soles, patches of sealskin. These were probably copied from the shoes of the inland Eskimo to the southeast, where they were invariably made from caribou fur, as the Copper Eskimo well knew. Around Coronation Gulf they were regarded with disfavour for ordinary use, because, although warmer, they readily soaked up the damp from the half-thawing floor of the snow-hut and immediately shed their fur. They were more practicable among the inland Eskimo, whose snow-huts were not so warm, because, lacking seal oil, they burned caribou fat in their lamps, which served in the main for lighting only.

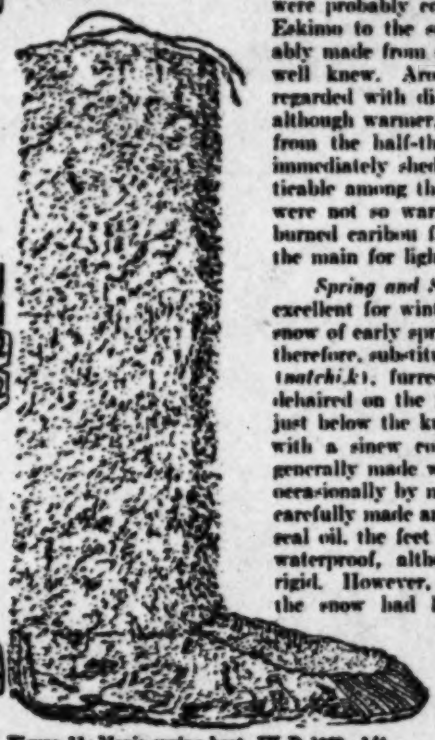
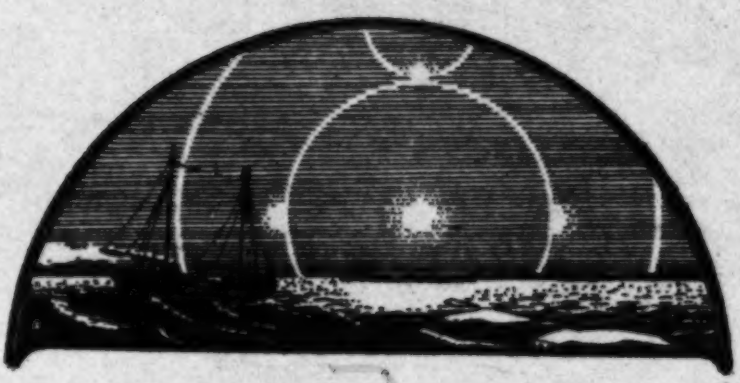


Figure 11. Man's spring boot. IV.D.1029. 1/4.

Spring and Summer Boots. Sealskin shoes were excellent for winter wear, but against the soft deep snow of early spring quite inadequate. The Eskimo, therefore, substituted for them long boots of sealskin (*natchik*), furred on the outside of the legs but dehaired on the feet (Figure 11). They reached to just below the knees, and were there tightly bound with a sinew cord that passed through a casing, generally made with an extra band of sealskin, but occasionally by merely sewing down the edge. When carefully made and saturated from time to time with seal oil, the feet of these boots were soft but quite waterproof, although the uppers were somewhat rigid. However, toward the end of spring, when the snow had largely melted, the streams were running, and pools of water lay everywhere, the Eskimo changed to their real waterboots (*iperautik*) (Figure 12), which were similar in shape, but dehaired throughout their entire



CHAPTER I

THE PROMISED LAND

A THICK fog had settled down upon the *North Star*, shutting everything from view save the big grounded ice-cake to which the schooner was moored. Now and then a momentary rift revealed a flat, gravelly beach two hundred yards to the south, and a moss-covered land sloping gently back to an interior plateau in a series of low terraces separated by innumerable ponds. All about us the sea was covered with a maze of floating ice which had gathered into a solid mass around a low cape half a mile to the eastward. We had run into a small bay, that was certain; and Bernard Harbour, the haven of our voyage, was not more than a few miles away. Beyond that we knew nothing. Even if no fog had held us up we

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29: Jenness E-5 (1914-1916) 1959
ND8 Copper Eskimo ND8

should have been no wiser, for the admiralty chart of this region, based on voyages of nearly a century before, was none too accurate. All we could do for the present was to tie up until the weather cleared and made it safe to venture once more among the floes.

My watch came in the early hours of the morning. It was the end of August, and the nights were still short, although the sun no longer circled around the sky throughout the whole twenty-four hours of the day. The Aurora Borealis was staging its last performance as I stepped on deck. Right across the northern sky stretched a giant arc bright with all the colours of the rainbow, and beneath flickered two filmy curtains of white light faintly tinged with rose. They lasted only a moment, then changed into a dazzling, whirling eddy that sent out flashing streamers, red and white and gold, that vanished as quickly as they appeared. Finally the eddy faded also, and a pale grey hue suffusing the eastern sky ushered in the dawn.

I sat down in the stern to meditate. It was ten days since we had said farewell to the friendly post of the Mounted Police at Herschel Island, turned our backs on the last outpost of civilization, and steered the *North Star* eastward. We had sailed over 500 miles in those ten days, and slept little, for the season was far advanced, and the ice, if it closed in at any time, might prevent our reaching the tiny bay in Dolphin

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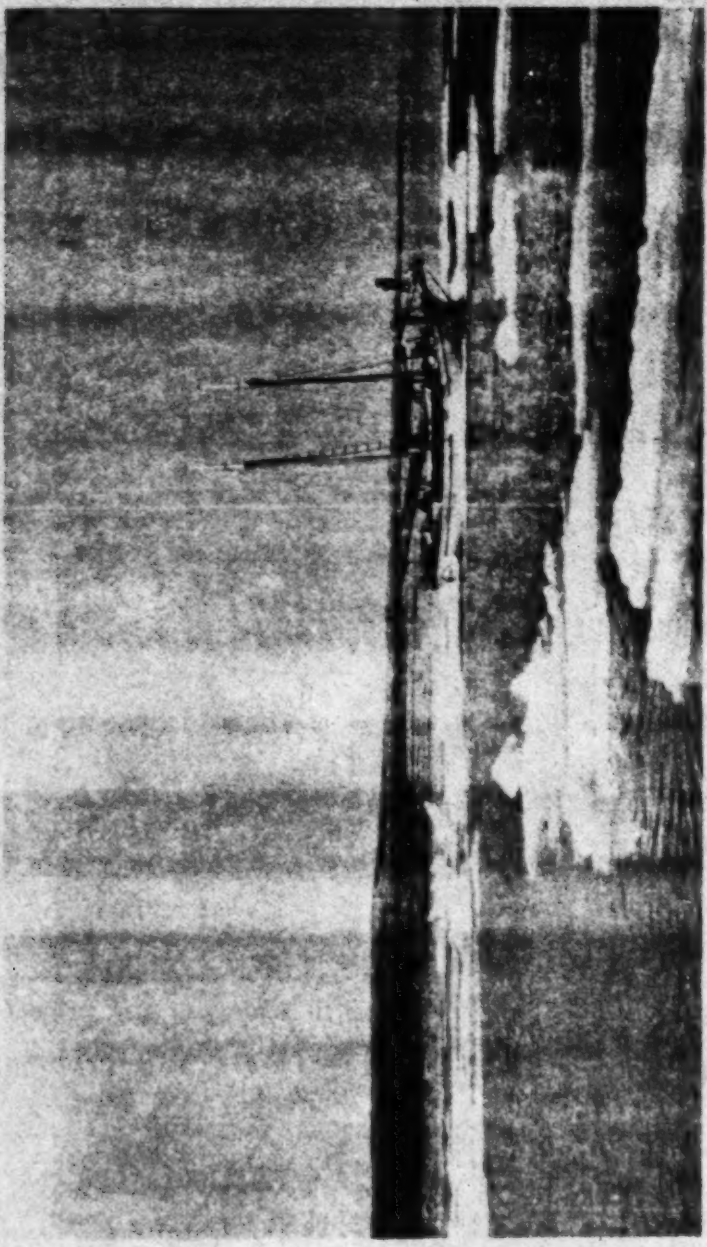

Photo by F. Johnson. 122 • 133

Running down to the barrier of floes, we tried to force our way through.